

THE AMENDMENT

The Specification has been amended to be in accord with the renumbered figures.

Claim 74 has been amended to recite that the compound binds to G-CSFR and "displaces or prevents the binding of G-CSF at the G-CSFR". Support therefor can be found, for example at page 44, lines 22-25 regarding competitive binding of the peptides of the invention with the G-CSF ligand.

The amended claim is presented above in a "clean" form, as required under 37 C.F.R. §1.121(c)(i). In addition, a marked up version of the amended claim, showing additions (underlined) and deletions (bracketed) is presented in the attached page pursuant to 37 C.F.R. §1.121(c)(ii).

The amended section of the Specification is presented above in a "clean" form, as required under 37 C.F.R. §1.121(b)(1)(ii). In addition, a marked up version of the amended section, showing additions (underlined) and deletions (bracketed) is presented in the attached page pursuant to 37 C.F.R. §1.121(b)(1)(iii).

No new matter has been added.

REJECTION UNDER 35 U.S.C. §112, FIRST PARAGRAPH

Claims 74, 85-87, and 89-93 stand rejected under 35 U.S.C. §112, first paragraph, as containing subject matter which was not described in the Specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

In particular the Examiner asserts that the claimed peptide (SEQ ID NO:208) does not have to exhibit any activity or property. Applicants disagree.

Claim 74 has been amended to recite that the compound binds to G-CSFR and "displaces or prevents the binding of G-CSF at the G-CSFR".

The Examiner has urged Applicants to amend the claims to recite a known activity that is enabled by the Specification. Applicants respectfully assert that they have done so. This activity is further enabled by the numerous examples set forth in the Specification. For example, Example 53 on page 49 of the Specification, demonstrates the activity of the elected peptide in displacing or preventing the binding of G-CSF at the G-CSFR. The recited activity has utility,

for example in that administration of the peptide can result in cellular proliferation.

Accordingly, Applicants assert that Claim 74, as amended, and Claims 85-87 and 89-93, which depend therefrom, meet the enablement requirements of 35 U.S.C. §112, first paragraph in that the Specification discloses the utility of the claimed peptide and provides enablement with respect to a method of use.

REJECTION UNDER 35 U.S.C. §101 (UTILITY)

Claims 74, 85-87, and 89-93 stand rejected under the 35 U.S.C. §101, as lacking patentable utility. The Examiner contends that the claimed peptide (SEQ ID NO:208) does not have to exhibit any activity or property. Applicants disagree.

In light of the aforementioned amendment to Claim 74, Applicants respectfully assert that the claimed peptide does have a credible and useful property. Applicants further assert that the utility of the elected peptide is established in the specification, such as in Example 78 on page 51, which demonstrates that SEQ ID NO: 208 has cell proliferation activity.

A utility rejection under the 35 U.S.C. §101 is only proper when the claimed subject matter is totally incapable of achieving a useful result. Compounds that bind to G-CSFR, such as is recited in the claims are useful for studying the important biological activities mediated by the receptor and can further find utility in the treatment of diseases, disorders and conditions that would benefit from activating or inactivating G-CSFR. More specifically, a compound, such as that encompassing SEQ ID NO:208, that exhibits cell proliferation activity would be expected to be useful in a variety of contexts, including chemotherapy, where a depressed neutrophil count often results following administration of a toxic chemotherapeutic agent. See, for example, lines 16-19 on page 40 of the Specification.

Any credible statement of utility consistent with the scope of the claimed invention that is made by Applicants is deemed to have satisfied the requirements of 35 U.S.C. §101. Applicants assert that they have presented a scientifically plausible use for the claimed invention, and that it is sufficient to satisfy the utility requirement. Accordingly, Applicants assert that rejection should be withdrawn.

SUMMARY

The above arguments, amendments to the Specification and amendments to the Claims,

are submitted for the purpose of facilitating allowance of the Claims and a sincere effort has been made to place this application in condition for allowance. An early notice of allowance is earnestly requested.

If in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned at (650) 330-4916.

Respectfully submitted,

By: Shelley P. Eberle
Shelley P. Eberle
Registration No. 31,411

REED & ASSOCIATES
800 Menlo Avenue, Suite 210
Menlo Park, California 94025
(650) 330-0900 Telephone
(650) 330-0980 Facsimile

Attachment: Marked Up Version Of The Claims Under 37 C.F.R. §1.121(c)(ii)
Marked Up Version Of The Specification Under 37 C.F.R. §1.121(b)(1)(iii)
Copy of Corrected Drawings, as forwarded to the Drawing Review Branch

F:\Document\0300\0014\Amend 1.111.doc



Atty Dkt No. 0300-0014
Serial No. 09/620,091

MARKED UP VERSION OF THE CLAIMS UNDER 37 C.F.R. §1.121(C)(II)

Claim 74 (Amended).

A compound comprising a peptide chain approximately 12 to 40 amino acids in length that binds to G-CSFR and displaces or prevents the binding of G-CSF at the G-CSFR, and contains a sequence of amino acids of formula (V)

(V) $CX^{IV}_1X^{IV}_2X^{IV}_3X^{IV}_4X^{IV}_5X^{IV}_6X^{IV}_7X^{IV}_8X^{IV}_9X^{IV}_{10}C$ (SEQ ID NO: 5)

wherein each amino acid is indicated by standard one-letter abbreviation, and wherein X^{IV}_1 is E, G, P, N, R, T, W, S, L, H, A, Q or Y; X^{IV}_2 is S, T, E, A, D, G, W, P, L, N, V, Y, R or M; X^{IV}_3 is R, Y, V, Q, E, T, L, P, S, K, M, A or W; X^{IV}_4 is L, M, G, F, W, R, S, V, P, A, D, C or T; X^{IV}_5 is V, T, A, R, S, L, W, C, I, E, P, H, F, D or Q; X^{IV}_6 is E, Y, G, T, Q, M, S, N, A or P; X^{IV}_7 is C, V, D, G, L, W, E, V, I, S, M or A; X^{IV}_8 is S, Y, A, W, P, V, L, Q, G, K, F, I, E or D; X^{IV}_9 is R, W, M, D, H, V, G, A, Q, L, S, E or Y; X^{IV}_{10} is M, L, I, S, V, P, W, F, T, Y, R, or Q.

COPY OF PAPERS
ORIGINALLY FILED

RECEIVED
JUL 11 2002
TECH CENTER 1600/2900

MARKED UP VERSION OF THE SPECIFICATION UNDER 37 C.F.R. §1.121(B)(1)(III)

The Paragraph at page 5, lines 8-10 is amended as follows:

Figures 1A, 1B, 1C, 1D, 1E, 1F, 1G, 1H, 1I, 1J and 1K [1-1, 1-2, 1-3, 1-4, 1-5, 1-6, 1-7, 1-8, 1-9, 1-10 and 1-11] provide the sequences of representative peptide chains contained within the compounds of the invention.